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ABSTRACT

In order for teacher compensation to serve as an incentive that reinforces broader organizational goals, the norms of the compensation structure must be aligned with the norms of the school organization. The first section of this paper presents a brief overview of changes in teacher compensation from 1820 to 1950. It describes how such changes have followed changes in the education system, and how organizational changes in the education system have tended to follow and reflect change in the broader society and economy. The next section describes changes in school organization over the past 50 years and discusses how compensation systems could have but did not change to reflect those evolutions. The following section describes more recent changes in the broader economy and workplace, including alterations in pay systems, and discusses how the current education reform movement parallels these external forces for change. The next section describes the implications of several education reform strategies for compensation, including systemic reform, the restructured New York City schools described by Linda Darling Hammond, and the high-performing school organizations discussed by Susan Albers Mohrman. The redesign of teacher compensation, however, must consider the following issues: the nature of skill blocks and the type of assessment system; the relationship of the pay system to certification and tenure requirements; the question of internal or external assessments; the design of performance awards; the sequence of performance and recognition; the implementation process; the relationship with decentralization and school-based management initiatives; the impact on administrator pay; and contextual variables. (LMI)

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Incentives, School Organization and Teacher Compensation

Allan Odden

Teacher compensation seems always to be a policy target for education incentives, either consciously or unconsciously. Many policymakers and practitioners at the local, state and federal level would like to pay teachers differently, i.e., in a way that provided incentives for improving practice as well as student performance. Nevertheless, teacher compensation structures have remained relatively constant for many decades. In most districts, teachers are paid according to a single salary schedule that provides salary increases for education units, degrees, and years of teaching experience. Teachers see themselves as being treated fairly by this compensation structure (disregarding dissatisfaction with actual dollar amounts). Indeed, the single salary schedule has brought uniformity of pay to elementary and secondary, male and female, and minority and non-minority teachers (Protsik, 1994).

In recent years, there have been unsuccessful attempts to reform teacher pay practices. One failure of the 1980s was the effort to graft merit pay mechanisms onto the teacher pay structure. While touted by the 1983 Nation At Risk report, merit pay was tried by a few states and districts but failed in nearly every instance (Cornett & Gaines, 1992). A second failure was the tepid adoption of career ladder programs, which were created to alter the flat career structure of teaching. Although somewhat less controversial than merit pay, career ladder plans also fell short of their promise (Frieberg & Knight, 1991; Schlechty, 1989).

But efforts to change teacher compensation are not just a recent phenomenon. Throughout the twentieth century there have been periodic attempts to change teacher

pay usually through variations of merit pay programs that attempted to base pay, or a pay bonus, on student or teacher performance. But nearly all of these efforts also failed (Johnson, 1986; Murnane & Cohen, 1986). One reason these attempts failed is that they treated compensation as a set of practices that were relatively independent of the larger educational context. But the organizations and compensation are inextricably linked.

In order for compensation to serve as an incentive that reinforces broader organizational goals, the norms of the compensation structure must be aligned with the norms of the school organization (Kelley, 1995; Lawler, 1981). One reason the landscape of teacher compensation reform is littered with the relics of old reforms is that past reform strategies failed to make these connections. Performance bonuses, at the heart of most past attempts to alter teacher compensation, simply are not compatible with a bureaucratically organized and managed system. Yes, individual merit is at odds with the collegial character of effective schools (Rosenholtz, 1985, 1989). But more importantly, in bureaucracies, the organizational form of most schools, supervisors, managers and executives are responsible for performance; workers -- teachers -- are responsible only for doing their job. A performance bonus for workers in this type of organization -- teachers in education -- simply does not make sense.

Fundamental changes in teacher compensation practices, thus, should reinforce rather than lead fundamental change in how education is organized, and are best considered as an adjunct of overall education system change. Indeed, past changes in

teacher compensation have followed just such fundamental changes in the nature of the overall education system. As the next section shows, moreover, organizational change in the education system also tends to follow and reflect change in the broader society and economy (see also Odden & Odden, 1995).

Teacher Compensation Change: 1820 to 1950[1]

The single salary schedule only recently has been the structure for teacher compensation. Prior to this approach to pay, teacher compensation was provided on a different basis and actually evolved through three major restructurings over the time period from roughly 1820 to 1950. Each evolution occurred when the education system itself underwent a major change, in part induced by broader changes in the economy and society of the time. The three salary systems can be characterized as "boarding 'round," position based compensation, and the single salary schedule (Protsik, 1994).

Boarding 'round. For most of the nineteenth century, public education was provided primarily in one room, rural schools. The economy was agrarian; over three-fourths of the population lived on farms. There was no "education system"; indeed, there were no "state education systems." Rural schools might have been public, but there were independently organized and managed. School time was interrupted for planting, cultivation and harvest of crops. Few children attended school all day, or all year.

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[1] This section draws heavily from Protsik (1994).

Education was required by only a small percentage of the population; the needed education, moreover, was mainly mastery of the simple basic skills -- reading, 'riting, and 'rithmetic. There was no teaching profession. Teaching was generally not seen as a career. For males, teaching was seen as a means for earning supplementary income. For females, teaching was seen as a transition job from the parent's home to the husband's home. There were low qualifications for teachers, who were mostly female. There were three primary requirements for the job of 'eacher: 1) mastery of the 3 Rs, 2) moral character, and 3) good appearance.

Teacher pay "fit" this education structure. Most teachers "boarded 'round" on a weekly basis, from one house to another in the community. There was a small amount of cash pay, but the largest component of compensation was room and board. The advantages of this system were that it was cheap, it reflected the largely non-cash character of the economy, and it provided for direct control of behavior. Being able to "supervise" teachers while they lived in one's home gave the community strong insurance that teachers were of high moral character -- there was little opportunity to anything that might not be considered moral. The disadvantages were that it helped maintain instability in the teaching ranks, both through the lack of professionalism and low pay, and drove most men away from teaching towards other endeavors that provided a way to support a family.

While such a teacher compensation structure seems outlandish from the perspective of the late 1990s, the key point to remember is that this system of compensation fit the economy and organization of education and schools at that time.

Changes evolved not because of some innate problem with this approach to compensation, of which there were many, but because of larger changes in the economy, particularly the shift from an agrarian to an industrial economy that began around 1880.

Position based compensation. As the economy began evolving from an agrarian to an industrial base, and away from the rural farm and towards the city factory, the nature of the education system also began to change. First, the country raised their expectations of the schools. More children were expected to learn more, an education refrain echoed today. Children started to attend schools for longer and more sustained periods of time, as they were less and less needed for or allowed to work in the factories of the city. Education became more salient for more individuals in the society, particularly those moving into managerial positions in the new industrial economy.

States began to create "state systems" of education, with common rules, regulations and requirements for both school accreditation and teacher licensure. There was a consolidation of the millions of formerly independent, small public schools into larger school sites and larger school systems. These larger units began to be run by "education experts," in both the administrative and teaching ranks. Standards for becoming a teacher were raised; teacher certification laws required greater education and expertise for earning a teacher license. As a result, it became more expensive -- in time and financial outlay for training -- to enter teaching. Predictably, these changes led to demands for higher wages and a compensation

system that was cash and not "in kind." Boarding 'round simply did not work as a compensation strategy for paying teachers in large urban school districts, who also were better trained, functioned in a cash economy, and wanted to live on their own.

As a result, a revolution in teacher compensation occurred. First, teachers began to be paid in cash on a salary basis. Second, salaries were set for different positions in the increasingly bureaucratically organized school systems. Different pay levels were set for elementary, middle and high school teachers, as well as for administrators. Unfortunately, within any position, lower salaries also were provided for women and minorities, a major inequity that would be the focus of the next round of change.

From the widely disparate pay in the boarding 'round approach to compensation, this system provided pay uniformity across schools within city and even rural school systems. The pay differences by level of school reflected differences in education requirements for earning a teaching license; elementary teachers needed only two years of post high school education in a "normal school" while high school teachers generally needed a full, four year's bachelors degree. Higher pay for administrators also reflected the additional training for the new breed of educational managers. The differential by gender reflected the societal norm of having the male be the family bread winner, and unfortunately, the differential by race reflected discrimination against minorities sanctioned by society and the law.

The single salary schedule. But the built in inequities in the position based teacher compensation structure -- against minorities, women and elementary teachers -

- destined the structure for future alteration. As opposition to overt discrimination against racial minorities, females, and education levels began to emerge even in the first part of the twentieth century, the position based teacher salary schedule which sanctioned discriminatory treatment along these lines began to change -- once again from the force of societal changes outside education per se.

The single salary schedule was the structure that emerged; it paid all teachers the same, regardless of level of school taught, gender or race. In 1921, Denver, Colorado and Des Moines, Iowa became the first cities to implement a single salary schedule, and by 1950 nearly all urban districts had a single salary schedule as the form of teacher compensation.

Several aspects of this compensation structure, often not recognized, should be mentioned. First, it eliminated all the overt discrimination in the previous salary structure. With a stroke of the pen, pay differentiation on the basis of gender, race, and education level were expunged from teacher pay schedules. Second, unlike most other salary structures for jobs in a bureaucracy that provided for pay increments on the basis of just years of experience, the single salary schedule provided pay increments also for education units beyond the bachelors degree. This was politically important because while the single salary schedule included incentives for elementary and middle school teachers to earn a bachelors degree, the units portion of the new salary schedule provided incentives for high school teachers, who had been required to have a bachelors degree, to continue to expand their education, and hopefully their professional expertise as well.

Third and very important, the single salary schedule did not pay all teachers the same. Salaries varied. Teachers with more years of experience had larger salaries. Teachers with more education units had larger salaries. Teachers with Masters Degrees earned higher salaries. The structure even paid more for additional jobs; coaches earned a salary supplement, advisors of clubs and other co-curricular activities often earned a salary increment. But fourth and critical to the success of the single salary schedule, the bases for paying teachers different amounts -- years of experience, education units and different jobs-- were objective, measurable, and not subject to administrative whim.

In short, while the single salary schedule eliminated the overt discrimination in the previous approach to teacher compensation, it did not, as popular rhetoric often implies, pay teachers the same. It paid teachers different amounts, but on the basis of objective measures, on which everyone could agree and which could not be contaminated by administrative or other system ineptitude.

Although the single salary schedule has lasted for over fifty years -- 80 years in some districts -- and has many advantages (Conley & Odden, forthcoming), the ferment in teacher compensation during the past decades suggests that change once again might be required. If the change forces of the past are a clue to the present, change in the broader economy and the organization of work could portray fundamental change in the education system, which would then imply that change in teacher compensation should follow.

And indeed such change is affecting the country. The next section shows how changes in school organization have attempted to evolve over the past fifty years and suggests how compensation systems could have but did not change to reflect those evolutions. The following section describes more current changes in the broader economy and workplace, including alterations in pay systems, and discusses how the current education reform movement parallels these change forces outside education. The remainder of the chapter then describes the compensation implications of several education reform strategies, including systemic reform, the restructured New York City schools described by Linda Darling Hammond, and the high performing school organizations discussed by Susan Albers Mohrman, the latter two addressed in other chapters in this book.

Teacher Expertise as a Basis for Teacher Compensation

Compensation theory counsels policymakers on the importance of matching pay practices to the strategic needs of organizations. Although the compensation structure might not be the lead instrument for organizational change, it clearly can be designed to function as an incentive that reinforces the goals, norms, values, human resources policies and workers' roles in any organizational change that a system -- either in the private or public sector -- could adopt. The compensation theory literature is filled with not only these general recommendations but also suggestions for particular compensation systems that would be appropriate for different types of organization and management approaches (Lawler, 1981, 1990; Schuster & Zingheim, 1992).

Kelley (1995) has recently applied this type of organization-compensation analysis to education in the twentieth century. In an intriguing article, she described six different organizational models of schooling, from one that would fit the scientific management of the early portion of the twentieth century to the virtual school that could become part of the information economy, and for each she discussed their emphasis on organizational goals, teachers' roles, organization and management, and human resources policy. From these emphasizes, she then identified the type of compensation structure that would have been appropriate for each school model, in terms of the emphasis on beginning pay, seniority pay, skill-based pay, and team and organizational performance based pay.

Of the many fascinating findings in the paper, three are especially important for this chapter. First, the single salary schedule started to become disconnected with the organizational form of school during the effective schools movement in the 1970s. Second, this disconnection became more attenuated in the 1980s as the education system began to change the overall curriculum to one of higher standards, and was further exacerbated by the high standards/high involvement components of the 1990s education reform movement discussed later.

In all instances there were three major, and quite similar, disconnections -- a rising and expanding focus on the professional expertise needed by effective teachers, the increasing roles for teachers in school management and operations, and a growing focus on results and school outcomes. The focus on professional teacher expertise, beyond just the initial set of skills to enter teaching, began with the effective schools

movement. The effective schools movement entailed developing among all teachers a generic set of pedagogical -- effective teaching -- skills required to teach the basic skills (Cohen, 1983); this focus on teacher professional expertise was relatively new within education reform, which had hitherto emphasized only entry level skills. Although teacher evaluation systems in some school districts were altered to focus on effective teaching expertise, no compensation reinforcement was provided.

The emphasis on teacher professional expertise continued into the 1980s and 1990s. The content driven reforms of the 1980s, begun in California with changes in its curriculum frameworks (Guthrie, Kirst & Odden, 1989) and accelerated through publication of national mathematics standards by the National Council of Teachers of Mathematics (1989), required that teachers not only learn extensive new subject matter content but also new, content related pedagogical strategies to teach the content successfully to all students [see, for example, entire issue of Educational Evaluation and Policy Analysis, 12(3), 1990].

Finally, the high standards/high involvement reforms of the 1990s not only required this curriculum and instructional knowledge of teachers, but also required a wide variety of additional expertise in order to engage successfully in the site based management of schools. The single salary schedule was only loosely coupled to these very specific and complex skill requirements, assuming that experience and education units represented the requisite skills and knowledge.

But just as the private sector has shifted more directly to a skill-based pay structure (Jenkins, Ledford, Gupta & Doty, 1992), so also could the education system

have moved in the same direction, and this movement could have legitimately begun during the effective schools era. These movements are appropriate because in both sectors the 1990s organizational and management approaches require a comprehensive and deep array of professional expertise among workers -- teachers in schools -- in order to get the job done. A skill-based pay system in education -- not directly part of the single salary schedule -- would simply reinforce and undergird the broader organizational change strategies being pursued within schools (see for example, Odden & Conley, 1992; Conley & Odden, forthcoming; Firestone, 1994).

Further, the increasing focus on educational results, coupled with the rising role of teachers in the organization and management of the school, suggests that group (faculty) rewards for organizational (school) performance could also appropriately become part of teacher pay, just as it has become part of employee pay in nonschool organizations where self managed work teams have power, authority and autonomy to produce results (Lawler, 1990). Clearly, designing appropriate measures of school performance as well as designing a sound performance reward system would be critical to the success of such an innovation in teacher pay. But aside from those important design issues, the point here is that they are substantively justified today whereas they simply were inappropriate for the bureaucratically managed school of the 1950s.

Current Changes in Workplace Organization and Compensation

In addition to the past fifty years of evolutionary change in school organization and the lost opportunities for compensation change, even more dramatic changes are

occurring in the broader economy today and parallel changes now seem to be occurring within education as well. Both, moreover, could presage change in compensation. The country's economy is undergoing change from an industrial to an information, micro-computer based system (Johnston, 1987; Osterman, 1994). As part of this evolution, changes are occurring in the organization of the workplace and in the manner in which employees are being paid. One dimension of this change, induced largely by the internationalization of the economy, is that companies are faced with pressures to improve quality, in a short time frame, and often at lower costs (Lawler, 1992). Incidentally, government agencies are facing similar pressures (Osborne & Gaebler, 1992).

While companies' responses are many and vary dramatically, there are several characteristics to the approaches being taken, many of which have similarities in current education reform. The first is an intense focus on quality or results. This is not just an emphasis on profits, either short or long term. It is an emphasis on the quality of the service provided or product made, with the requirement that the quality must improve in quantum, not marginal amounts. The goal is to dramatically improve quality and thus organizational performance by large amounts.

Second, companies are learning that such large increases in performance cannot be attained by improvement made within a hierarchically organized and managed system (Galbraith & Lawler, 1993; Lawler, 1992; Mohrman, 1994). As a result, many companies decide they need to restructure and reorganize to produce this new, higher level of performance. In this process, they decentralize both their

organizational structure and their management systems. Increasingly, they create multi-functional work teams and give them power, authority and autonomy to accomplish organizational goals. They also hold these teams accountable for results (Barzelay, 1992; Katzenbach & Smith, 1993; Mohrman, 1994; Mohrman, Lawler & Mohrman, 1992; Lawler, 1986, 1992). Galbraith and Lawler (1993) have termed the overall approach, which has many dimensions but for which self managed work teams are key, the new logic of how to organize for high performance. Odden & Odden (1995) show how these principles can be applied to education.

Third, in order to function well, teams generally recruit and develop multiply skilled team members. The skills generally include deep expertise in the technical requirements for the tasks the team must perform, but also expertise in many additional functional areas, as well as expertise in the business skills needed to engage in self management. New and ongoing investments in training member of the work teams -- teachers in education -- accompany this new focus on worker knowledge and skill.

Finally, many companies implementing decentralized approaches to management and organization also have designed new ways of compensating members of the work teams. They have learned the importance of matching pay practices to the strategic needs of their organizations (Kelley, 1995; Lawler, 1981, 1990; Lawler & Jenkins, 1992; Schuster & Zingheim, 1992). These lessons include creating pay practices that enhance the core competencies on which organizations base their strategies. These core notions include higher performance, multiple skills and

competencies, and self management.

As a result, concepts such as skill-based pay, pay for knowledge, pay for professional expertise, collective rewards for adding value to performance, and gainsharing characterize new compensation strategies that have been developed and used successfully in organizations outside of the schools (Jenkins, Ledford, Gupta & Doty, 1992; Lawler, 1990; Ledford, 1991; Schuster & Zingheim, 1992). In these new systems, individuals are not paid on the basis of seniority for just the job they have been hired to do, because in fact they perform many jobs. They are paid on the basis of the skills and competencies they develop that enable them to perform many job tasks as members of work teams. Further, work team members often have a portion of pay that depends on the results of the team's effort in terms of organization performance. In these systems, job base pay, seniority based pay and individual merit and incentive pay are out, and skill-based pay and team based performance awards are in. In short, compensation has been changed to align itself, and the individuals in the work team, to the strategic directions and organizational goals of the workplace.

Current education reforms reflect many of these changes in the non school portion of the nation's economy. For example, since about 1986, with publication of the National Governors' Association (1986) Time For Results report, education reform has had a strong results orientation. While not universally accepted, the results focus was reinforced by the national education goals that emerged from the 1989 Education Summit called by then President George Bush, and was undergirded

by the 1994 Goals 2000: Educate America Act, which was enacted in a bipartisan manner during the presidential administration of Bill Clinton and codified the national goals into federal education policy.

Current education reform also is struggling with designing the appropriate governance and management system for a results driven education system. There have been proposals to restructure local school boards (Danzberger, Kirst & Usdan, 1992), to decentralize education management to school sites (Committee for Economic Development, 1994), and to move to a school based financing system (Odden, 1994). While the bulk of site based management strategies have been poorly and insufficiently designed (Summers & Johnson, 1994; Wohlstetter & Odden, 1992), emerging research is providing information on how both design and implementation could be improved (Mohrman & Wohlstetter, 1994; Odden & Wohlstetter, forthcoming; Odden, Wohlstetter & Odden, forthcoming; Robertson, Wohlstetter & Mohrman, forthcoming; Wohlstetter, Smyer & Mohrman, 1994).

The multiple skill nature of the workforce and changes in compensation have not as yet had as explicit parallels in the education reform agenda. Although the Coalition of Essential Schools argues for a multiple skilled teacher workforce, essentially trading in all high school administrative and non-teaching professional staff for teachers skilled in at least two content areas as well as counseling, deaning, and other functional areas, this notion has not become a central part of either the mainstream of education reform or approaches to site based management. Although the failed attempts to alter compensation discussed earlier reflect the ferment in

compensation and the angst surrounding the current structure, explicit movements to change the nature of teacher compensation, as is occurring in many private sector organizations, is only beginning to occur in education (Cornett & Gaines, 1992).

A related phenomenon, however, has become part of education reform and could well be the trigger for more significant movement on the teacher compensation front -- namely, the effort to license beginning teachers and then certify more advanced teachers on the basis of measures of professional expertise, i.e., what teachers know and are able to do (Interstate New Teacher Assessment and Support Consortia, 1992; National Board for Professional Teaching Standards, 1994; Wise & Darling Hammond, 1987; Wise & Leibbrand, 1993). By the end of the 1994-95 school year, moreover, some states and local districts will provide salary increments for teachers who are Certified by the National Board for Professional Teaching Standards; this policy will represent an element of skill-based pay for teachers.

As the full coterie of 34 Board Certificates at all education levels gets developed over the next five years, and as states move to license teachers on the basis of a beginning set of knowledge and skills, the country will have mechanisms that could be adapted to identify and measure several levels of teacher professional competence according to a set of written standards and a rigorous assessment system. These mechanisms, moreover, should reflect a professional approach to assessing teacher practice; the mechanisms encourage the development of advanced practice, and the processes of assessment include interaction over professional practice with local teacher teams and school faculties, then with different networks of teachers

outside the home school, and finally with a broader, national community of expert teachers. As the single salary schedule now allows for differential pay according to objective measures, a skill-based dimension to teacher compensation could draw upon these new mechanisms to measure teacher expertise and use these measures as the basis for providing salary increments to teachers.

In sum, significant changes are occurring in the economy, the organization and management of the workplace, and in compensation practices in organizations outside education. Within education, there are strong parallels to all these changes, although some components are not as well developed as yet, and changes in compensation are only in the beginning stages. Nevertheless, the linkages between organization and compensation that are developing outside of education appear to be relevant to education as well, especially the shift to a skill-based pay approach. The next sections identify several different education reform strategies and the compensation changes that would be consistent with them.

Systemic Reform[2]

Systemic education reform is one of the central education reform strategies of the 1990s (Smith & O'Day, 1991). Systemic reform envisions fundamental change in education and how it is organized. The goal is to teach all students to high standards. The goal is literally to raise the performance of all children to a level attained only by the top ten percent today -- a quantum improvement in performance. To accomplish this goal, schools probably will need to restructure. As this process unfolds, the

[2] This section draws from Mohrman, Mohrman & Odden, forthcoming.

compensation structure could change to become more aligned with the strategic components of the system reform strategy.

More specifically, systemic education reform includes expectations that all students will perform at high levels, implementation of high quality curriculum standards (e.g., National Council of Teachers of Mathematics, 1989) coupled with new and revised instructional materials, use of new forms of performance assessment linked to the curriculum standards, substantially expanded professional development along with dramatically revised pre-service teacher training (Little, 1993), and restructured management, governance, and school finance policy (Mohrman & Wohlstetter, 1994; Odden, 1994; Wohlstetter, Smyer, & Mohrman, 1994). In short, systemic educational reform requires: 1) that teachers develop a new array of professional knowledge and skills to teach a thinking oriented curriculum; 2) a dramatic change in the organization and management of schools that also requires new teacher expertise; and 3) focused attention on school performance -- student achievement results. The current single salary structure reinforces none of these three strategic thrusts.

But a redesigned compensation structure aligned with the strategic initiatives of systemic education reform and drawing upon the new approaches to compensation discussed above could reinforce these core dimensions of systemic reform. First, a compensation structure aligned with systemic reform could provide incentives -- salary increments -- for developing the knowledge and skills needed to teach new curriculum standards. Research [see, for example, Ball, Cohen, Peterson & Wilson,

1994] shows that while there is strong, positive local teacher response to new ambitious curriculum frameworks, teachers generally lack the knowledge and skills to implement them. This curriculum requires deeper and more conceptual understandings of content, an array of new pedagogical strategies that focus on concept development and problem solving, and a set of new sophisticated assessment expertise. Creating this new professional expertise will require substantial investment of time and energy in professional development, an element also part of systemic reform. While enhancement of professional expertise could be reward enough for many to engage in this process (McLaughlin & Yee, 1988), a change in the compensation structure to stimulate this engagement and to reward those who develop and use such new knowledge could also be warranted.

A compensation structure aligned with systemic reform could also provide incentives to engage in effective school based management (SBM). Engaging teachers in the management and decision processes of the schools requires yet another array of expertise. Including this expertise in a skill-based compensation structure would connect such new organization and management strategies to the compensation system. Further, we are beginning to learn more about how to design effective SBM programs. While many efforts at decentralized management have had little success (Wohlstetter & Odden, 1992), the high involvement management framework has been useful in distinguishing more from less effective programs; the more power, knowledge, and information are part of SBM strategies, the better they work (Odden & Odden, 1994; Odden & Wohlstetter, forthcoming; Robertson, Wohlstetter &

Mohrman, forthcoming; Wohlstetter, Smyer, & Mohrman, 1994). Changes in compensation could further strengthen these efforts, as they have in other organizations (Jenkins, Ledford, Gupta & Doty, 1992; Lawler, 1986; 1992).

Finally, a compensation structure aligned with systemic reform could also provide rewards -- incentives -- for schools and faculties that produce *improvements* in educational results. Focusing on results is a central aspect of systemic reform. Although student outcomes are a complex result of individual differences and educational experiences, they also derive from educational experiences in schools. Compensation practices can focus attention on results by tying them, at least in some small but significant way, to rewards. Keep in mind that the focus would be on school performance in terms of results and not individual teacher performance. Collective awards for organization performance have been used successfully in many organizations (Lawler, 1992; Schuster and Zingheim, 1992) and offer potential for education (Richards, Fishbein & Melville, 1993).

Restructured Schools In New York City

Another example of how a revised teacher compensation system could undergird a successful reform strategy, by providing financial incentives through aligning compensation with new school organizations, could be developed for the restructured New York City schools described by Linda Darling Hammond in Chapter xx. The schools she describes have been successful over a 6-10 year time period in producing high student achievement results, including thinking, problem solving, communication and writing.

These schools reflect the high involvement model (Mohrman, 1994; Odden & Wohlstetter, forthcoming; Wohlstetter, Smyer & Mohrman, 1994) for decentralized management and organization. They have budget and personnel power and have dispersed power within the school through a variety of houses and teams and other small teacher decision making groups; many of these teams, moreover, are cross functional thus engaging teachers in job tasks usually provided either by professional staff within schools or at the central office. The schools have an intense focus on developing a wide variety of professional expertise from curriculum and instruction, to cross functional tasks and team based decision making. The schools also have developed numerous information dissemination and sharing channels, both horizontally, and vertically. However, while the schools have developed a variety of extrinsic and intrinsic incentives, so they have some dimensions of the rewards component of the high involvement model, they have not altered the formal, extrinsic rewards - overall teacher compensation.

It is clear that these schools require a wide range of complex expertise on the part of teachers in order to function effectively. Teachers need deep knowledge of curriculum content and related pedagogy; further, because the schools use an integrated, multi-disciplinary curriculum approach, most teachers also need strong knowledge of a content and pedagogy in a second subject area. Incentives for teachers to develop and use these skills could be incorporated into a revised compensation system that:

- started teachers at a beginning salary that was competitive but provided a pay

increase when they met the standards of practice required for a beginning professional in the school

- provided pay increments for teachers who developed expertise in a second, and even third subject area, so they could be flexibly used in the multi-disciplinary approach of the school
- provided additional pay increments for teachers who advanced their professional expertise by working towards higher than beginning standards of professional practice
- provided a further salary increase for teachers who, over the long term, earned Board Certification from the National Board for Professional Teaching Standards.

In other words, the teacher compensation structure could be altered or replaced with a skill-based structure that provided direct incentives for creating the curriculum and instructional expertise needed by all teachers. Such a compensation approach also would reinforce school investment of funds and teacher investment of time and effort in the extensive professional development that is imbedded in all operations of these schools.

In addition, since the school is staffed by teachers who not only provide the instructional program, but also engage in team based management of school operations and provide a variety of functional services such as curriculum development, professional development, student counseling, parent outreach, marketing and recruiting, etc., a skill-based pay structure could be expanded with a series of skill blocks for these management and decision making tasks, and these

multi-functional tasks. Although the exact form of such a skill-based system could vary across each school, Mohrman, Mohrman & Odden (1994) provide the outlines of one type of generic structure.

A school performance bonus, either for salary supplements for faculty or for school improvement, could also potentially enhance the operations and effectiveness of these schools. Although outside recognition of the success of these schools currently is a form of extrinsic rewards teachers now receive, a school performance bonus would have to be carefully designed in order to not diminish the intrinsic and extrinsic rewards currently operating for both teachers and students as well as to provide an additional incentive for the focus on student achievement results that currently is a norm of these schools' cultures.

In general, these schools reflect one manifestation of how a school in a full fledged systemic reform context could operate, as well as the high involvement/high standards school of Kelley (1995). As a result, a comprehensive skill-based structure for compensation could be a new component of the overall rewards structure in the school, thus aligning how teachers are paid with the type of knowledge and skills needed by these school organizations to function well and the considerable investment in ongoing teacher training.

Motivation for Higher School Performance

Mohrman's chapter describes how school organization and management can be altered to motivate teachers to become centrally and psychologically involved in reconceptualizing what schools are and thus designing new strategies -- both

instructional and organizational -- that can deployed to produce much higher levels of student performance. Based on expectancy theory, she discusses a range of organizational designs, characterized by an increasing degree of organizational change and teacher involvement, that can be used to produce increasing improvements in the performance of an organization, in this case schools.

There are three major features of her argument that can be highlighted, all leading to potential change in teacher compensation. First, her argument focuses on the involvement of teachers, the key professionals in schools, in producing hikes in organizational results. Her purpose is to engage teachers in the issue of schoolwide performance. Both intrinsic and extrinsic incentives can be designed to foster this engagement.

Second, the degree and span of teacher involvement increases as the expected degree of improvement in organizational results rises. Modest improvements might only require "quality circles" or suggestion involvement. The next level of improvement might entail redesigning jobs and/or redesigning unit, team or house strategies. But quantum improvements in performance, such as teaching nearly all students to high standards, would require the highest level of teacher involvement and a concern with the performance of the entire school. The focus of such high involvement would entail redesigning the entire school organization, the curriculum and instruction program, the human resources strategies, the management systems, and organizational culture and norms, which include an intense focus on results. Skills to engage in these broader tasks go far beyond curriculum and pedagogy.

Third, Mohrman notes that an important element of organizational redesign includes an altered compensation structure, which is any organization's -- including a school's -- formal, extrinsic reward system.

Based on contingency theory and findings from other knowledge production organizations, Mohrman argues that broad and deep involvement of teachers in these many aspects of schools far beyond their own classrooms would likely provide substantial intrinsic rewards. The high involvement model would provide teachers with power over the budget and the recruitment and selection of individuals to be part of the school faculty; it also would provide substantial professional development and a wide array of new information from fiscal data to student achievement data as well as community and parent satisfaction. In other organizations, Mohrman notes, these factors function as substantial intrinsic incentives. The best teachers also are motivated by these factors (Hart, 1995).

Mohrman also states that such a high level of teacher involvement in redesigning the school would require a range of new professional expertise that included new skills in curriculum and instructional, but also skills in management and in other functional areas usually staffed by supervisors and administrators such as professional development, curriculum development and student counseling. Implicit in her argument is a different staffing of schools, much like the pattern in Linda Darling Hammond's schools, in which teachers are the primary staff, and engage in multiple roles with teaching being the core role.

A redesigned compensation system that provided incentives through a skill-based pay structure for teachers to develop the expertise to engage professionally in these multiple roles would function as an extrinsic reward for the skill needs of the new, higher performance school. Further, a schoolwide faculty or within-school house or team performance award could also become a formal, extrinsic incentive that would reinforce the results focus of the school and the school's need to produce high levels of student performance. Put a different way, a redesigned teacher compensation system that consisted of skill-based pay for curriculum, instruction, functional and management skills, and school and team awards for increases in school performance (primarily student achievement) would align the formal, extrinsic rewards and incentives of the school with the intrinsic rewards and incentives that flowed from high involvement, organizational restructuring, and job redesign.

Conclusion

School organization, incentives and teacher compensation should be closely linked. Indeed, however structured, compensation is *a* if not *the* major, formal extrinsic incentive in any organization including schools. As this chapter has argued, the incentives imbedded in the compensation system function best when they are aligned with the broader goals of the organization and directly reinforce them.

The chapter has argued that since mid-century and particularly for the current era of education reform, school organization and education goals have been changing in ways that could have been substantially fortified by changes in teacher compensation. Teacher compensation could have changed from the single salary

schedule invented in the early part of this century that provided salary increments based on the objective measures of years of experience and education units, to a single salary schedule that provided salary increments based on direct, sophisticated and professional measures of teacher knowledge and skill, and which also included performance awards that would be provided for all school faculties and teams with schools for improving schoolwide performance, with student achievement in academic subjects being the anchor performance indicator.

Such changes in compensation -- skill-based pay and collective performance awards -- have been developed and tried in a wide variety of nonschool organizations, including non profit, human service and knowledge production organizations. Further, these compensation innovations outside of education have helped to improve the performance of the organization in which they have been tried, have improved the individual salaries of the individuals on the teams in those organizations, and have also improved working conditions because they usually been part of new management structures that decentralized operations to decision making teams (Jenkins, Ledford, Gupta & Doty, 1992; Lawler, 1990). Thus, the time seems to be ripe for redesigning the formal, extrinsic incentive in all schools -- teacher compensation.

Embarking on this task, though, poses a variety of substantive and research issues. One would be the nature of skill blocks that could be identified and the type of assessment system needed to determine when each teacher had mastered the competencies in the skill block and could use them successfully in the work place. The work of the Interstate New Teacher Assessment and Support Consortia (1992),

the PRAXIS system (a performance based system for teacher licensure) of the Educational Testing Service, and the National Board for Professional Teaching Standards (1994) can be used to inform both of these issues, but numerous questions remain. An important task in this effort is to determine the type of content knowledge, and classroom management and pedagogical expertise needed by a range of teachers, from beginning to expert. An important hurdle in this effort will be to identify levels of professional practice that are attainable and distinguishable, since the tendency is to expect beginning teachers to be as accomplished as experienced teachers (Reynolds, 1995). Another issue is be whether each of these three areas of expertise would be emphasized equally at all levels. Since content knowledge is absolutely necessary to teaching subject matter, and is somewhat easier to assess, it could be argued that it could be stressed more at the beginning stages and assessments of content knowledge could be quite rapidly developed and used to expand school system's ability to provide pay increments for such an important teacher skill in the very short term.

Still another issue is how a skill-based pay system, with several levels of distinguishable knowledge and skills, would be connected with a new licensure system, National Board certification, tenure, as well as the recertification requirements in many states. It could easily be argued that a skill-based pay structure could be designed to replace the latter two elements in current policy. This would turn tenure into a requirement that teachers reach a level of professional practice beyond that required for licensure or lose their license. It would transform

recertification from a credit taking exercise to a process of demonstrating even higher levels of professional practice. The issue here is whether a new form of teacher compensation is simply an add-on policy to all current structures, or potentially a mechanism to replace many related structures.

A further issue is how skill block mastery in a new skill-based pay system would be assessed. Implicit in the above discussion is that many of them, particularly those related to curriculum and instruction, would be assessed externally according to national or state standards. Indeed, this is the practice of many professions, particularly those which individuals enter after earning a bachelors degree (Kelley and Taylor, 1995). But some skill blocks could also be assessed by the local education system or school site, particularly those that pertained to the specific strategies (e.g., nongraded elementary classrooms, cooperative learning, middle school houses) chosen by a site to accomplish ambitious student achievement goals. The array of skill blocks and the mix of external and internal assessment is a large issue on which more information should be collected as districts experiment with such new forms of teacher compensation.

The design of performance awards would also need to be carefully considered, and much work is needed to identify alternative designs that work. Student achievement undoubtedly would be a core aspect of a performance award, but states and districts would need a good test to serve as the basis for such an award, because research shows that organizations with such awards produce more of what is in their performance measures and less of what is not (Lawler, 1990). Insuring that the

measure pertained to all students in the school, or students in houses or teams, is another issue, in order not to have performance awards for individual teachers. How to measure performance, to insure that the incentives function to encourage schools to boost the performance of all students and to do so each year, is another thorny issue that needs to be addressed. The standard that would qualify a school or team of teachers for the award is another issue; setting the standard as some type of rolling, historical average, so that each school is measured against past performance, is probably the most feasible. But designing the specifics is complex and will require careful attention to numerous technical issues. Finally, a stable funding pool for an effective performance award is another non-trivial topic that is critical to such a piece of compensation. The tendency in the past has been to eliminate funding when dollars are scare, a practice that erodes trust in the system and undercuts the incentive force of such a program.

How to sequence skill-based pay with a performance award is an additional topic that should be researched. Since student achievement is codependent on both what the teacher does and what the student does -- constructivist learning requires significant student engagement, effort and work -- it could be more appropriate to implement the skill-based components of teacher compensation before a performance award. Some argue, moreover, that a performance award -- stakes for teachers -- is not appropriate unless consequences for students also are attached to test performance. Undoubtedly, practice on this issue will vary across the 15,000 school districts and 50 states in the country. Analyzing which set of practices produces the best results and

why is another important topic on which more information is needed.

The processes of designing new approaches to pay also matter. Indeed, experience in organizations outside of education suggests that the design and implementation process is more important than nearly all of the technical issues (Dewey, 1994; Jenkins, Ledford, Gupta & Doty, 1992). Further, the key aspect of the design process is high involvement of the people affected -- teachers in education -- in design, implementation and modification. The implication for education is that teachers, unions, administrators, school boards and, at the state level, political leaders, will all need to be involved as equal partners in order to design any new compensation structure that can be supported by all parties. How districts and states structure the design and implementation processes could be one of the most important, short term research priorities.

Since skill-based pay and group performance awards have usually accompanied decentralized, team and high involvement management strategies in non-school organizations, another important research topic are the interconnections between these two initiatives in education. It could be that an important element of skill-based pay, linked primarily to the curriculum and instructional expertise needed to teach a high standards curriculum, would provide a substantial boost to education system performance. It also could be that an even broader skill-based pay structure, that also included compensation skill blocks for functional and management skills, would be much more powerful, especially as an accompaniment to more dramatic decentralized management. The linkage between the management and organization system, and the

teacher compensation structure, and the individual and interacative impacts on performance is a further topic that should be analyzed as education moves to design and implement innovations in teacher compensation.

Relatedly, how do the above proposals for changes in teacher compensation impact administrator pay, as well as current staffing patterns in schools? If teachers are paid on the basis of knowledge, skill and collective performance, should not administrators be paid that way as well? If so, what types of skill blocks should form the basis of administrator pay? Further, what types of staffing restructurings are part of decentralized school management, especially in structures that have teachers engaged in much broader school roles, and how is this reflected in new compensation design?

Finally, contextual variables that affect any of these issues need to be considered. Questions such as level and changes in resources need to be considered. Are compensation changes easier to make when resources are growing rather than declining? Do high revenue districts have an advantage over low revenue districts in designing compensation innovations? Can performance awards work when the funding pool for them is not legally protected, for example, in some kind of a trust fund? Further, does the legality of collective bargaining and the type of decision making practice matter? Are compensation changes more easily made when a union is involved or when bargaining is not legal? Does joint and collegial decision making pave a better road for teacher compensation innovation, compared with hard-nosed collective bargaining or unilateral administrative decision and policy making? Do

urban districts, which have a strong incentive to innovate and improve, provide a better context for engaging in the above far reaching reforms, or are such changes easier in suburban or rural districts, where it might be easier to reach consensus on complex issues?

In conclusion, the time seems to be substantively ripe for reconsidering how teachers (and administrators) are paid. Current education reforms, and higher performing school organizations, require individuals who have an array of curriculum and instructional skills far beyond those attained for initial licensure, usually also require individuals with skills to engage in a variety of non-teaching functional and managerial tasks in schools, and expect the results to dramatically boost the academic achievement of all students. These goals could be reinforced with a single salary schedule that provided pay increases on the basis of skills, knowledge and expertise rather than years of experience and educational units, as well as bonuses for school and within school team and house performance improvements. Developing, designing, implementing and funding such new compensation strategies raise a host of technical, substantive, financial, and political issues, all of which need to be researched over time. But it seems more than appropriate to consider the formal, extrinsic incentive in the education system -- compensation -- and to reconstitute it so that it reinforces the broader changes in education, rather than remains as the largest expenditure of the education dollar with little direct connection with the goals of the education system.

References

Ball, Deborah Lowenberg, David K. Cohen, Penelope L. Peterson, & Suzanne M. Wilson. (1994). Understanding State Efforts to Reform Teaching and Learning: Learning from Teachers About Learning to Teach. Papers presented at the annual meeting of the American Educational Research Association, New Orleans.

Barzelay, Michael. (1992). Breaking Through Bureaucracy: A New Way for Managing in Government. Berkeley, CA: University of California Press.

Cohen, Michael. (1983). Instruction, Management and Organizational Issues in Effective Schools. In Allan Odden and L. Dean Webb, Eds. School Finance and School Improvement: Linkages for the 1980s. Cambridge, MA: Ballinger.

Committee for Economic Development. (1994). Putting Learning First: Governing and Managing the Schools for High Achievement. New York: CED.

Conley, Sharon & Allan Odden. (forthcoming). Linking Teacher Compensation to Teacher Career Development: A Strategic Examination. Educational Evaluation and Policy Analysis. Under Review.

Cornett, Lynn N., & Gale F. Gaines. (1992). Focusing on Student Outcomes: Roles for Incentive programs. The 1991 National Survey of Incentive Programs and Teacher Career Ladders. Atlanta, GA: Southern Regional Education Board.

Danzberger, Jacqueline P. Michael W. Kirst & Michael D. Usdan. (1992). Governing Public Schools: New Times, New Requirements. Washington, DC: Institute for Educational Leadership.

Dewey, Barbara J. (1994). Changing to Skill-Based Pay: Disarming the Transition Landmines. Compensation and Benefits Review, 6(1), 38-43.

Educational Evaluation and Policy Analysis. (1990, Fall). 12(3), 1990 (Entire issue.)

Firestone, William. (1994). Redesigning Teacher Salary Systems for Education Reform. American Educational Research Journal, 31(3), 549-574.

Freiberg, J., & Knight, S. (1991). Career Ladder Programs as Incentives for Teachers. In S.C. Conley & B. S. Cooper (Eds.), The School as a Work Environment: Implications for Reform (pp. 204-220). Boston: Allyn & Bacon.

Gailbraith, Jay R. & Edward E. Lawler III. (1993). Organizing for the Future. The New Logic for Managing Complex Organizations. San Francisco: Jossey Bass.

Guthrie, James W., Michael W. Kirst & Allan R. Odden. (1989). Conditions of Education in California. Berkeley, CA: University of California, School of Education, Policy Analysis for California Education.

Hart, Ann Weaver. (1995). Educational Evaluation and Policy Analysis.

Interstate New Teacher Assessment and Support Consortia. (1992). Model Standards for Beginning Teacher Licensing and Development: A Resource for State Dialogue. Washington, DC: Council of Chief State School Officers.

Jenkins, Douglas, Ledford Gerald, Gupta, Nina, & Doty, Harold. (1992). Skill-based Pay: Practices, Payoffs, Pitfalls and Prescriptions. American Compensation Association.

Johnson, Susan Moore. (1986). Incentives for Teachers: What Motivates, What Matters? Educational Administration Quarterly, 22(3), 54-79.

Johnston, William. (1987). Workforce 2000. Indianapolis, IN: Hudson Institute.

Katzenbach, Jon R. & Douglas K. Smith. (1993). The Wisdom of Teams: Creating the High-Performance Organization. Boston: Harvard Business School Press.

Kelley, Carolyn. (1995). Teacher Compensation and Organization. Madison, WI: University of Wisconsin-Madison, Wisconsin Center for Education Research, Consortium for Policy Research in Education-The Finance Center.

Kelley, Carolyn, & Corri Hansen Taylor. (1995). Compensation and Skill Development in Four Professions and Implications for the Teaching Profession. Available from the University of Wisconsin-Madison, (CPRE).

Lawler, Edward E. and G. Douglas Jenkins. (1992). Strategic Reward Systems. In M. D. Dunnette and L. M. Hough, Eds. Handbook of Industrial and Organizational Psychology, 2nd edition, (pp. 1009-1055). Palo Alto, CA: Consulting Psychologists Press.

Lawler, Edward E., III. (1981). Pay and Organizational Development. Reading, MA: Addison-Wesley.

Lawler, Edward E., III. (1986). High-involvement Management. San Francisco: Jossey Bass.

Lawler, Edward E., III. (1990). Strategic Pay. San Francisco: Jossey-Bass.

Lawler, Edward E., III. (1992). The Ultimate Advantage. San Francisco: Jossey-Bass.

Ledford, Gerald. (1991). The Design of Skill-Based Pay Plans. In Milton Rock & Lance Berger, Eds. Handbook of Compensation. New York: McGraw Hill.

Little, Judith Warren. (1993). Teachers' Professional Development in a Climate of Educational Reform. Educational Analysis and Policy Analysis, 15(2), 129-152.

McLaughlin, Milbrey & Sylvia Yee. (1988). School as a Place to Have a Career. In Ann Lieberman, Ed. Building a Professional Culture in Schools (pp. 23-44). New York: Teachers College Press.

Mohrman, Susan Albers. (1994). High Involvement Management in the Private Sector. In Susan Albers Mohrman & Priscilla Wohlstetter, Eds. School-Based Management: Organizing for High Performance (pp. 25-52). San Francisco: Jossey-Bass.

Mohrman, Allan, Susan Albers Mohrman & Allan Odden. (forthcoming). Aligning Teacher Compensation with Systemic School Reform: Skill-Based Pay and Group-Based Performance Rewards. Educational Evaluation and Policy Analysis.

Mohrman, Susan Albers & Priscilla Wohlstetter, Eds. (1994). School-Based Management: Organizing for High Performance. San Francisco: Jossey-Bass.

Mohrman, Susan Albers, Edward E. Lawler III, & Allan M. Mohrman, Jr. (1992). Applying Employee Involvement in Schools. Education Evaluation and Policy Analysis. 14(4), 347-360.

Murnane, Richard J. & David K. Cohen. (1986). Merit Pay and the Evaluation Problem: Why Some Merit Pay Plans Fail and a Few Survive. Harvard Educational Review, 56(1), 1-17.

National Board for Professional Teaching Standards. (1994). National Board Certification: Principles of Successful Implementation. Detroit: Author.

National Council of Teachers of Mathematics. (1989). Curriculum and Evaluation Standards for School Mathematics. Reston, VA: Author.

National Governors' Association. (1986). Time for Results. Washington, DC: Author.

Odden, Allan. (1994). Decentralized Management and School Finance. Theory Into Practice, 33(2), 104-111.

Odden, Allan & Eleanor Odden. (1994). Applying the High Involvement Framework to Local Management of Schools in Victoria, Australia. Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Odden, Allan & Eleanor Odden. (1995). Educational Leadership for America's Schools. New York: McGraw Hill.

Odden, Allan & Sharon Conley. (1992). Restructuring Teacher Compensation Systems. In Allan Odden, Ed. Rethinking School Finance: An Agenda for the 1990s, San Francisco: Jossey-Bass.

Odden, Allan, Priscilla Wohlstetter & Eleanor Odden. (Forthcoming). Key Issues in Effective School-Based Management. School Business Affairs.

Odden, Eleanor & Priscilla Wohlstetter. (Forthcoming). Strategies for Making School Based Management Work. Educational Leadership.

Osborne, David and Ted Gaebler. (1992). Reinventing Government. Reading, MA: Addison-Wesley Publishing House, Inc.

Osterman, Paul. (1994). How Common is Workplace Transformation and Who Adapts It? Industrial and Labor Relations Review, 47(2), 173-188.

Protsik, Jean. (1994). History of Teacher Pay and Incentive Reforms. Paper prepared for the Conference on Teacher Compensation, November 2-4, 1994, Washington, DC.

Reynolds, Anne. (1995). Elementary School Journal.

Richards, Craig, Daniel Fishbein, and Paula Melville. (1993). Cooperative performance incentives in education. In S. L. Jacobson and R. Berne (Eds.), Reforming Education: The Emerging Systemic Approach (pp. 28-47). Thousand Oaks, CA: Corwin Press.

Robertson, Peter J., Priscilla Wohlstetter & Susan Mohrman. (forthcoming). Generating Curriculum and Instructional Innovations through School-based Management. Educational Administration Quarterly.

Rosenholtz, Susan J. (1985). Effective Schools: Interpreting the Evidence. American Journal of Education, 93(3), 352-388.

Rosenholtz, Susan J. (1989). Teachers' Workplace: The Social Organization of Schools. New York: Longman.

Schlechty, Phillip C. (1989). Career Ladders: A Good Idea Going Awry. In T. J. Sergiovanni & J. H. Moore (Ed.), Schooling for Tomorrow: Directing Reforms to Issues that count (pp. 356-376). Boston: Allyn & Bacon.

Schuster, Jay R. & Patricia Zingheim. (1992). The New Pay: Linking Employee and Organizational Performance. New York: Lexington Books.

Smith, Marshall S. & Jennifer O'Day. (1991). Systemic school reform. In Susan Fuhrman & Betty Malen (Eds.), The Politics of Curriculum and Testing, 1990 Yearbook of the Politics and Education Association (pp. 233-267). Bristol, PA: Falmer Press.

Summers, Anita A. & Amy W. Johnson. (1994). A Review of the Evidence on the Effects of School Based Management Plans. Presented at the Conference on Improving the Performance of America's Schools: Economic Choices. Board of Science, Technology and Economic Policy, National Research Council, National Academy of Sciences, Washington, DC.

Wise, Arthur & Jane Leibbrand. (1993). Accreditation and the Creation of a Profession of Teaching. Phi Delta Kappan, 75(2), 133-136.

Wise, Arthur & Linda Darling-Hammond. (1987). Licensing Teachers: Design for a Profession. Santa Monica, CA: RAND Corporation.

Wohlstetter, Priscilla & Allan R. Odden. (1992). Rethinking School-Based Management Policy and Research. Educational Administration Quarterly, 28(4), 529-549.

Wohlstetter, Priscilla, Roxane Smyer, & Susan Albers Mohrman. (1994). New Boundaries for School-Based Management: The High Involvement Model. Educational Evaluation and Policy Analysis, 16(3), 268-286.